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REMARKS

Applicants deeply appreciate the indication that Claims 5-10 are allowed and that Claims 11 and 12 are allowable if rewritten in independent form to include the limitations of the base claim and any intervening claims. Claim 11 has been amended accordingly and both Claim 11 and Claim 12, which depends from Claim 11, are respectfully believed to be in condition for allowance. Minor modifications have been made to the Specification to provide consistency and clarity and to refer to a previously amended, but not entered, paragraph, which identifies both page and line numbers rather than the paragraph numbering found in the published patent application. No new matter has been added.

Objection to the Specification:

Page 14, Line 17, was objected to for referring to the directional switch by numeral 117 rather than by numeral 227. Appropriate correction was made to this and other inconsistencies in this Paragraph created by prior counsel. No new matter has been added.

Rejection Under 35 U.S.C. Section 102:

Claim 1 was rejected under 35 U.S.C. Section 102(b) as being anticipated by Knowlton et al. (U.S. Patent No. 5,742,975). Knowlton et al. in Column 8, Lines 40-57, with reference to Figs. 10A and 10B recites:

A scrub head shock absorbing system 188 is provided to prevent the second end 180 of the scrub head 44 from contacting the front left wheel 34B. **The system 188 includes a first bracket 190 having one end thereof pivotally attached to the frame of the front portion 32 at a first pivot point 192. The other end of the first bracket 190 is pivotally attached to a second bracket 194 at a second pivot point 196.** The second bracket 194, in turn, is operatively connected to the scrub head 44. Also part of the

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second bracket 194 is an arm 198. Further comprising the shock absorbing system is a rod 200 having one end thereof pivotally attached to the frame of the front portion 32 at a third pivot point 202 and the other end thereof pivotally attached to the arm 198 at a fourth pivot point 204. A spring 206 with one end attached to the frame of the front portion 32 and another end attached to a point on the first bracket 190 between the first pivot point 192 and the second pivot point 196 is also included in the system 188.

Moreover, Knowlton et al. in Column 9, Lines 19-24, with reference to Figs. 11A and 11B recites:

The lift mechanism 210 is comprised of the first bracket 190 that is, in turn, comprised of **a four element pivoting parallelogram structure**. The lift mechanism 210 further includes the **second bracket 194** which, as previously mentioned, is attached to the first bracket 190 and retains the scrub head 44.

This presents a marked contrast to Applicant's claimed Invention which requires in amended Claim 1: "...the head having a pivotal connection with the lift unit for rotation of the head on **a generally vertical pivot axis** in the plane and **generally at the center of length of the head** for rotation of the head on the axis to different angular positions with respect to the plane;...".

Therefore, as clearly shown in **Fig. 4B** in Knowlton et al. as well as Figs. 11A and 11B, the pivoting occurs through **cantilevered action with the first bracket 190 between the first pivot point 192 to the second pivot point 196**. It is not about the center of the length of the head. Bracket 190 is clearly positioned off to the side of the rotating head and pivoting does not occur at the center of the head. Furthermore, Knowlton states that the lift mechanism 210 is comprised of the first bracket 190 which is, in turn, comprised of a four

element pivoting parallelogram structure. A four element pivoting parallelogram structure negates the presence of pivoting generally at the center of length of the head for rotation of the head on **a generally vertical pivot axis.**

Pivoting around the center provides an important advantage since it reduces manufacturing costs and provides an ease of maintenance and operation. This is due to the fact that the weight load is symmetrically balanced across the full length of the head and does not involve cantilevered action from an off-center pivot point.

Moreover, every ninety (90) degree rotation of the head allows the operator of the machine to go from minimum to maximum floor coverage by going from vertical alignment of the brushes (one brush width) to horizontal alignment of the brushes for the full coverage using the full width of both brushes. This increases the speed and ability for the operator to change floor surface treatment coverage with minimal rotation of the head.

It is now a basic tenet of patent law that the results and advantages produced by the claimed subject matter, of which the prior art is devoid, cannot be ignored simply because the claim limitations are similar to the otherwise barren prior art. It is respectfully believed that patentability of the claimed subject matter must be determined in view of the invention "as a whole." Moreover, for a valid 35 U.S.C. Section 102 rejection, it is respectfully believed that a single reference must teach each and every element of the rejected claim. In this case, the **pivoting of the head generally about the center of length of the head in a generally vertical pivot axis** is a completely missing element that provides significant advantages not found in Knowlton et al.

Moreover, a proper application of a reference against a device described and claimed in a patent application requires broadly that the anticipatory device be substantially the same as the anticipated device in structure, function and result. In this case, the structure is different since the head in Knowlton et al. **does not** rotate generally about the **center of the length of the head but "...rotates from left to right during lateral application of force to the scrub head"** (Column 9, Lines 39-41). The Applicant's Invention, as claimed, eliminates the stress and the associated maintenance expense of using cantilevered action to rotate a first brush in relation to a second brush. The Applicant's Invention, as claimed, provides a significant advantage that does not teach the source of the problem created by a cantilevered pivoting of the head nor the slightest hint or suggestion as to the solution. Moreover, there is not the slightest teaching, suggestion or incentive to modify the disclosed device found in Knowlton et al. The Applicant's Invention provides significant cost reductions and stability. These aspects are not present when the head is cantilevered to move from side-to-side upon the application of force as disclosed by Knowlton et al.

Moreover, Figs. 12A and 12B only show horizontal pivoting at points 206 and 214 and there is no **vertical pivot axis in the plane as specifically required in Applicant's Claim 1**. Specifically, Knowlton et al. recites in Column 9, Lines 36-43, as follows: "In this regard, FIGS. 12A and 12B respectively show the lift mechanism 210 in the absence of a lateral force being applied to the scrub head 44, as in FIG. 10A, and **how the lift mechanism 210 rotates from right to left during application of a lateral force to the scrub head 44**, as in FIG. 10B." Moreover, it is respectfully believed that all claim limitations and functional language must be considered and cannot be ignored. The Federal Circuit has long held that a key element in the

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claim, not found in the directly pertinent prior art, cannot be ignored in the face of the fact that it led to the successful results produced by the device. In this case, the element and function of pivoting the head generally **around the center of the length of the head in a generally vertical pivot axis** is wholly absent from Knowlton et al. Moreover, it is now a basic tenet of patent law that the United States Patent Office is not permitted to ignore the results and advantages of the claimed subject matter, of which the prior art is devoid, simply because the claim limitations are similar to the otherwise barren prior art. In this case, the limitation in Applicant's Claim 1 wherein **pivoting is generally at the center of length of the head** for rotation of the head in a **generally vertical pivot axis** is very dissimilar to the disclosure of Knowlton et al. where pivoting is either cantilevered from a distant point or **pivoting occurs several places along several horizontal axes to move the head from left to right**.

Therefore, Claim 1 overcomes the rejection under 35 U.S.C. Section 102(b) as being unpatentable over Knowlton et al.

Claims 2-4 and 13 were also rejected under 35 U.S.C. Section 102(b) as being anticipated over Knowlton et al. Since Claims 2-4 and 13 depend from, and contain all of the limitations of Claim 1, Claims 2-4 and 13 are felt to distinguish from Knowlton et al. in the same manner as Claim 1.

Claim 1 was also rejected under 35 U.S.C. Section 102(b) as being anticipated by Thatcher et al. (U.S. Patent No. 6,023,813). Thatcher et al. recites:

FIG. 1 depicts the first side view of the preferred embodiment floor scrubber and buffer invention with the pads rotated to bring them into contact with the floor. The frame 101 is shown providing attachment points for the major components of the invention. Specifically, these major components of the

invention include: the motor 103, the vacuum blower 104, a pump 120, the main drive wheel 105, the hydraulic fluid tank 301, the fresh water tank 119, the recovery tank 118 and, in the preferred embodiment, **two scrubbing pads 107a, 107b and two buffing pads 106a, 106b. The buffing pads 106a, 106b are designed to be fully independent and to provide height correction and even pad pressure for each pad. (Column 4, Lines 60-67 and Column 5, Lines 1-5).**

Therefore, the two buffing pads and the two scrubbing pads form two totally separate heads. The scrubber pads 107a and 107b are fixed and the buffer pads 106a and 106b are able to rotate by a cantilevered pivoting element from a point in the middle of the entire machine. This is not a point that is central to either one of the heads. Thatcher et al. recites:

FIG. 9 shows the turning pattern of the invention, with 9a showing a left-hand turn, 9b showing a forward, no turn, and 9c shows a right-hand turn. One of the innovative features of this invention is the ability to rotate the buffer pads 106a, 106b out of alignment with the scrubber pads 107a, 107b to make turning the scrubber/buffer easier and to allow the rear pads 106a, 106b to track or follow the front pads 107a, 107b. A pivot point 901 is provided and shown in the approximate center of the scrubber/buffer assembly. (Column 8, Lines 39-47).

Therefore, although the pivot point is in the center of the machine itself, the pivot point is not in the center of either one of these two heads.

As previously stated, a basic tenet of patent law is that the results and advantages produced by the claimed subject matter, of which the prior art is devoid, cannot be ignored simply because the claim limitations are similar to the otherwise barren prior art. It is respectfully believed that patentability of the claimed subject matter must be determined in view

of the invention "as a whole." For a valid 35 U.S.C. Section 102 rejection, it is respectfully believed that a single reference must teach each and every element of the rejected claim. In this case, the pivoting of the head generally about the center of the length of the head is a completely missing element that provides significant advantages not found in Thatcher et al. and cannot be equated to an off-center and cantilevered pivoting element that allows a front pair of buffing pads to move from side-to-side. It is respectfully believed that the pivoting must be the center of a head and not the entire machine itself.

It is respectfully believed that proper application of a reference against a device described and claimed in a patent application requires broadly that the anticipatory device be substantially the same as the anticipated device in structure, function and result. In this case, the structure disclosed in Thatcher et al. is very different and there is no pivoting about the center of the head but movement of the front head in cantilevered relationship to the middle of the machine for moving the front head left and right. The result is very different with a cantilevered pivoting element that allows a front pair of buffing pads to move from side-to-side found in Thatcher et al. compared to **pivoting of the head generally about the center of length of the head in a generally vertical pivot axis, as claimed by the Applicant**, that allows ninety (90) degree rotation of the head that enables the operator of the machine to go from minimum to maximum floor coverage by going from vertical alignment of the brushes (one brush width) to horizontal alignment of the brushes for the full coverage using the full width of both brushes to increase the speed and ability for the operator to change floor surface treatment coverage with minimal head rotation.

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In addition, hindsight is not the test of anticipation nor is it alone sufficient that other disclosed devices might have been adapted without too much difficulty to produce the object and function of Applicant's Invention, as claimed. There is no motivation to modify Thatcher et al. by someone with ordinary skill in the art since Thatcher et al. is only concerned with moving a front pair of buffing pads from side-to-side from a cantilevered position in the middle of the entire floor treatment machine.

Therefore, Claim 1 overcomes the rejection under 35 U.S.C. Section 102(b) as being unpatentable over Thatcher et al.

Claim 13 was also rejected under 35 U.S.C. Section 102(b) as being anticipated over Thatcher et al. Since Claim 13 depends from and contains all of the limitations of Claim 1, Claim 13 is felt to distinguish from Thatcher et al. in the same manner as Claim 1.

It is now believed that all of the pending claims in the present application, namely, Claims 1-13 are in condition for allowance. Favorable action and allowance of the Claims is therefore respectfully requested.

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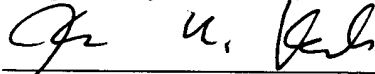
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If any issue regarding the allowability of any of the pending claims in the present application could be readily resolved, or if other action could be taken to further advance this application such as an Examiner's amendment, or if the Examiner should have any questions regarding this present amendment, it is respectfully requested that Examiner please telephone the Applicant's undersigned attorney in this regard.

Date: January 8, 2004

Respectfully submitted,



Kevin M. Kercher

Reg. No. 33,408

Blackwell Sanders Peper Martin LLP

720 Olive Street, 24th Floor

St. Louis, Missouri 63101

(314) 345-6000

ATTORNEY FOR APPLICANT